

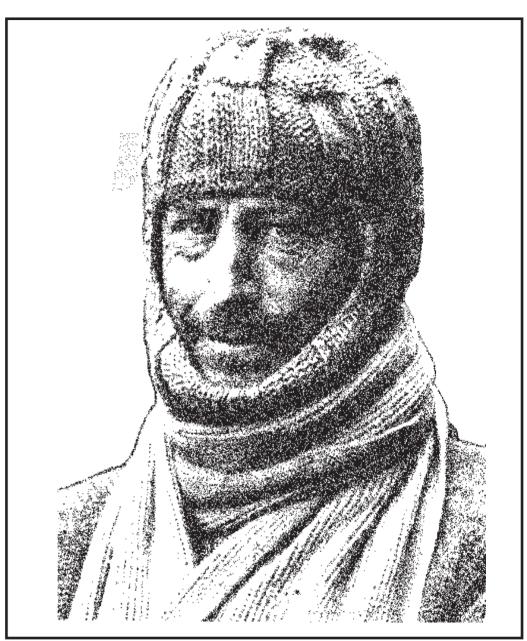
In the footsteps of Sir Douglas Mawson Gallery Teacher information for Early Years (R-2)



This Outreach Education Program for schools is made possible by the partnership between the South Australian Museum and the Department of Education and Children's Services. Outreach Education is a team of seconded teachers who are based in public institutions.

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South Australian Museum Education Program

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Visiting the museum Student expectations

We would like you, and all our visitors, to enjoy visiting the museum.

- Please stay with your group.
- Walk safely around the exhibitions to see all the best parts.
- Share the space with other visitors.
- Talking is an important part of learning. Please remember to use a quiet voice.
- The museum glass cases can get dirty or scratched. Please enjoy looking without touching.
- Please use the stairs and avoid the lifts. (They are slow and are needed by people who can't use the stairs.)
- Help keep the museum clean. Please eat and drink outside on the lawns.

Visiting the museum Student expectations

Bookings are essential for all school visits to the museum.

Please supervise your groups of learners at all times. If your visit involves visiting more than one gallery, divide your class into small supervised groups. Respect the needs of other classes that have booked particular galleries. **Parents must specifically consent to students under 18 participating in activities involving indirect supervision.**

When you arrive please let the staff at the front desk know. If the weather is fine, your students can enjoy the outside lawn area while they wait.

Do not use clipboards with metal backings and clips. For your convenience and for the safety of our exhibits, cardboard backings are available at the front desk.

The coffee shop and the museum shop do not cater for large groups. Small groups can visit, with adult supervision. Bags must not be taken into either shop.

Only students with special needs should use the lifts. (The number of students in the museum would causes excessive delays for people who really need lifts.)

Unfortunately the museum has limited capacity to store bags. A large crate or two for lunches is easier to keep secure.

Supervisors' bags must be left at the security desk, or be inspected and tagged by the security officers.



South Australian Museum Education Program

In the footsteps of Sir Douglas Mawson Gallery Teacher notes

Program aims

This program has been prepared for junior primary classes. While visiting 'In the Footsteps of Sir Douglas Mawson' gallery students can follow his active pursuit of science, and his triumph in overcoming immense difficulties with determination and courage as he strove for goals he believed in. Students will gain insights into Mawson's life and the challenges of living in Antarctica. They will discover information about the geological evidence he found and about the animals of the Southern Ocean.

Curriculum links

The Mawson Gallery promotes the essential learnings through gaining an understanding of the interdependence of all living things and their connection with the physical environment. It also has a strong futures focus, pointing out our planet's past climate, landforms and ever-changing environments, which helps students to building future scenarios. Mawson's expeditions can be evaluated through critical thinking and analysis of his discoveries. The importance of communication is demonstrated through Mawson's use of radio and this can be compared with modern technological advances.

It also has a strong Futures focus, pointing out that our planet's past climates, landforms and environments have been ever-changing, and showing how understanding our past helps us predict possible futures.

Science

From the Earth and space and Life systems strands students will focus on outcomes

- 2.1, 1.5 and 1.6 as they:
- sort rocks from structural features
- identify features that help animals survive in their habitat

Society and Environment

Students will study aspects of *Place*, *Space and Environment* as they:

Studying *Time*, *continuity and change* and *Place*, *space and environment* strands students will focus on outcomes 1.1, 1.2, 1.5 as they

- compare their life and living conditions with Mawson's in the early 1900's
- organises events into the correct sequence
- use maps to identify key locations of Mawson's work

Design Technology

Mawson actively pursued innovative technologies and applied them to his needs. Students can replicate this through the strands *Critiquing and Designing* when they focus on outcomes 1.1, 1.2 as they

- judge the design of clothing and equipment used in Antarctica
- consider alternative materials and designs for equipment
- suggest alternative designs for equipment or clothing

Teaching strategies

The gallery will be booked for your class for an hour (or an hour and a half if an Education Officer is taking your class for some of your visit).

Many different teaching activities can be done in this gallery. Select from the following possibilities, or make up your own. The first activity is essential for all groups.



In the footsteps of Sir Douglas Mawson Gallery Teacher notes

Activity 1: Let's have a look

All classes will need at least ten minutes to explore on their own before starting more directed activities.

Students, particularly at this level, need to establish their ideas about museums, as well as the exhibition, by making some of their own connections. You could formalise this exploration by asking students to report their findings to the class.

It is highly recommended that students do not have any activity sheets when first exploring the gallery.

Activity 2: Sir Douglas Mawson's work

Mawson's main interest was geology. His findings in South Australia inspired him to visit Antarctica where he contributed significantly to its exploration. Split the class into groups. Each group can investigate an aspect of Mawson's work. Ask them to find information on:

- rocks, hills and fossils
- glaciers, ice and snow
- exploring Antarctica
- studying animals in Antarctica and the Southern Ocean
- what clothing was needed in Antarctica.

After a time collect the groups together again. Ask them to join with a partner from a different group to share what they have learnt.

A final collaborative effort of reporting the main points to the rest of the class could conclude the activity.

Activity 3: Alphabet Search

Do an alphabet search throughout the display.

A is for Antarctic map

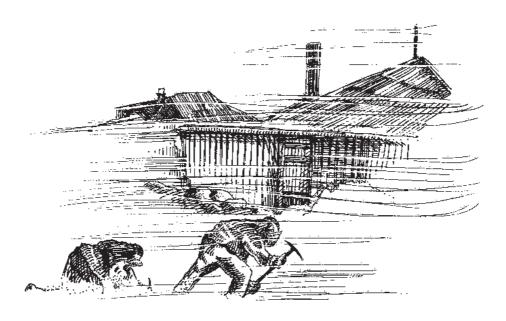
B is for boots (warm and fur lined)

C is for cameras

D is for ... and so on

Activity 4: Complete the Activity Sheets

The activity sheets in this pack have been designed for students from Reception to Year 2 and are suitable for pre-reading to competent readers. There are three levels of student activity sheets – one for parent helpers to read the questions to the students and record their responses, an easy version for students capable of reading simple instructions and harder version for competent readers. Teachers need to assess the appropriateness of the questions for their particular students. Some 'cut and paste' modifications will often be appropriate. The questions can be answered in groups to encourage interaction and sharing of perceptions.



In the footsteps of Sir Douglas Mawson Gallery Teacher notes

Background information

Living in the Antarctic

The artefacts in the exhibition bring to life the difficulties experienced by Mawson and the other expeditioners. Students will learn how the challenges of living and working in the harsh conditions were overcome. Clothing technology has progressed significantly since Mawson's time in Antarctica. He relied on natural materials such as woollen underwear, Burberry cotton outer garments, fur mitts and finnesko (reindeer skin) boots with dried grass for warmth.

Other important pieces of equipment included goggles to protect the eyes from glare and freezing wind, skis for moving over snow, crampons for slippery ice conditions and ice axes. Sledging parties needed tents for protection against the freezing conditions. Sleeping bags of camel hair or reindeer skin were used in the huts and by sledging parties.

Cooking for the treks was done on a Nansen cooker, which was designed for maximum efficiency – cooking food and melting snow simultaneously.

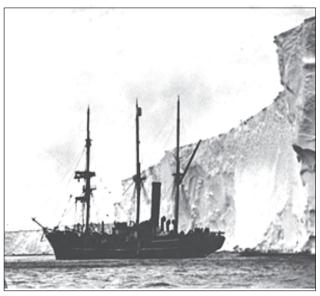
Equipment taken by parties journeying from the base huts was packed onto sledges, which were hauled by dogs or men over the snow and ice. Mawson favoured dogs to pull the sledges. He also saw the advantage of motorised transport, and took an aeroplane on the AAE. However, a crash shortly before leaving Australia disabled the plane. Mawson took it without wings and used it as an air-tractor for hauling sledges. He used aeroplane flights extensively on BANZARE.

Mawson quickly took advantage of new inventions and technological improvements and applied them to Antarctic exploration. Students can learn how various materials were used.

Partial replica of Mawson's hut

The replica of part of the AAE Main Base will help students visualise the working and living conditions of Mawson and other early expeditioners. They can compare their current living conditions and speculate on other possible differences and similarities.

Mawson's hut is an easily recognised symbol of his Antarctic exploration. It provided essential protection against the harsh Antarctic weather. The expedition parties had to survive inside the cramped huts during the long winter. Their confined space was also used for preparing equipment and organising supplies for the scientific trips. In the AAE Main Base hut, one work area was in the narrow central dining area with the table hoisted to the ceiling to allow large items such as sledges to be worked on. The only personal space each man had was his bunk. Everyone was rostered for chores such as cooking and cleaning.



Aurora

Science from Ships

When *Aurora* (AAE) and *Discovery* (BANZARE) sailed between Australia and Antarctica the scientists took measurements and collected samples. Little was known about the bio-diversity of the Southern Ocean. Some of the animals discovered on the expeditions are on display. Students can try their hand at identifying new species just as the scientists did by using the animals on display and the computer interactive *Discovering New Species*.

Geographical and geological studies were also made. For example Mawson suggested that, unlike the Arctic ice cap, there was an extensive landmass beneath the Antarctic ice cap. More recent studies have shown he was correct.